

Collier Shannon Scott

Collier Shannon Scott, PLLC
Washington Harbour, Suite 400
3050 K Street, NW
Washington, DC 20007-5108
202.342.8400 TEL
202.342.8451 FAX

May 13, 2004

VIA ELECTRONIC MAIL

Mr. Daniel O. Hill
Director of the Office of Strategic Industries
and Economic Security
Copper Short-Supply Petition
Regulatory Policy Division
Bureau of Industry and Security
Department of Commerce
P.O. Box 273
Washington, DC 20044

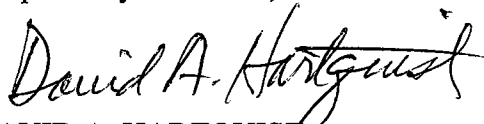
Re: Initial Comments Regarding the Receipt by the Department of Commerce of a Written Petition Requesting the Imposition of Short-Supply Export Controls and Monitoring on Recyclable Metallic Materials Containing Copper

Dear Mr. Hill:

Pursuant to the Bureau of Industry and Security's notice of April 22, 2004, published at 69 Fed. Reg. 21,815, we hereby provide initial comments on behalf of the co-petitioners, the Copper & Brass Fabricators Council, Inc., and its member companies and the Non-Ferrous Founders' Society and its brass and bronze foundries with respect to the above-referenced petition.

Please do not hesitate to contact the undersigned if you have any questions concerning these comments.

Respectfully submitted,



DAVID A. HARTQUIST
JEFFREY S. BECKINGTON
JENNIFER E. McCADNEY

Counsel to the Co-Petitioners

Enclosures

**BEFORE THE
BUREAU OF INDUSTRY AND SECURITY
U.S. DEPARTMENT OF COMMERCE**

**INITIAL COMMENTS ON PETITION REQUESTING THE IMPOSITION OF SHORT-
SUPPLY EXPORT CONTROLS AND MONITORING AS TO RECYCLABLE
METALLIC MATERIALS CONTAINING COPPER**

**ON BEHALF OF
THE COPPER & BRASS FABRICATORS COUNCIL, INC.,
AND ITS MEMBER COMPANIES**

AND

**THE NON-FERROUS FOUNDERS' SOCIETY
AND ITS MEMBER COMPANIES**

**DAVID A. HARTQUIST
JEFFREY S. BECKINGTON
JENNIFER E. MCCADNEY
COLLIER SHANNON SCOTT, PLLC
3050 K Street, N.W., Suite 400
Washington, D.C. 20007
(202) 342-8400**

Counsel to Petitioners

**ECONOMIC CONSULTANTS:
MICHAEL T. KERWIN
GEORGETOWN ECONOMIC SERVICES, LLC
3050 K Street, N.W.
Washington, D.C. 20007
(202) 945-6660**

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INITIAL COMMENTS ON PETITION REQUESTING THE IMPOSITION OF SHORT-SUPPLY EXPORT CONTROLS AND MONITORING AS TO RECYCLABLE METALLIC MATERIALS CONTAINING COPPER

These initial comments are filed on behalf of the Copper & Brass Fabricators Council, Inc. (“CBFC”), and its member companies, and the Non-Ferrous Founders’ Society (“NFFS”) and its member companies (collectively referred to as “co-petitioners”), who are the parties that filed the above-referenced petition requesting the imposition of short-supply export controls and monitoring with respect to exports of copper scrap and copper-alloy scrap from the United States under section 7(c) of the Export Administration Act of 1979, as amended (“the Act” or “the EAA”), 50 U.S.C. App. § 2406(c). In support of their petition, the CBFC and the NFFS hereby provide additional information and data in selected subject areas identified by the Department in its notice of April 22, 2004 (69 Fed. Reg. 21,815).

I. EXECUTIVE SUMMARY

A. There Has Been A Significant Increase In Exports Of Copper Scrap And Copper-Alloy Scrap In Relation To Domestic Supply And Demand

Exports of copper scrap and copper-alloy scrap from the United States have experienced significant increases in relation to domestic supply and demand within a specified period of time. Notably, for the five-year period 1999-2003, exports of copper-based scrap increased by 138.2 percent, with much of this growth attributable to rising demand in China. See Petition at 10, 13 and Exhibits 2 and 3 attached. In the single year between 2002 and 2003, exports of copper-based scrap grew by 32.9 percent. Id. Export data for the year 2003, when analyzed on a monthly basis, provide a context for understanding the magnitude of this increase, as total exports for copper-based scrap were higher in each of the twelve months of that year than in any of the four previous years. See Exhibit 4.

Exports of copper-based scrap have not only increased in the absolute sense, but also have increased as a percentage of the U.S. scrap supply and in relation to U.S. demand (consumption). Exports have expanded rapidly from 16.2 percent of total U.S. copper-based scrap supply in 1999, to 23.7 percent in 2000, 28.9 percent in 2001, and 31.1 percent in 2002, before surging to 39.6 percent in 2003. See Exhibit 2. In addition, from 1999 to 2003, U.S. exports of copper-based scrap more than tripled in relation to total consumption of the product within the United States. In relation to U.S. brass mill consumption, these exports increased their share from 30.1 percent in 1999 to 89.8 percent in 2003. See Exhibit 2.

B. There Have Been Both A Significant Increase In Domestic Price And A Domestic Shortage Of Copper-Based Scrap

The rapid increase in exports of copper scrap and copper-alloy scrap has resulted in a domestic shortage and increased U.S. prices for these products. Notwithstanding the correlation between the price of copper-based scrap and the more expensive copper cathode, which has also experienced price increases, U.S. prices for copper-based scrap have increased significantly as a result of growing exports. See Petition at 14. Specifically, average U.S. prices for Number 1 and Number 2 copper scrap have consistently increased from 69.62 cents and 58.98 cents per pound in 2001 to 78.14 cents and 68.38 cents per pound in 2003, respectively. Id. at 14-15. These data result in an annual average increase for the three-year period of 12.2 percent for No. 1 copper scrap and 16.0 percent for No. 2 scrap. Id. Monthly average prices for 2003 and 2004 show an even more dramatic increase in price. For example, in comparison to January-April 2003, the average price for No. 1 copper scrap in January-April 2004 grew by 66.7 percent (from 73.68 cents per pound to \$1.2286 per pound), and the average prices for No. 2 scrap grew by 73.8 percent (from 63.10 per pound to \$1.0969 per pound). See Exhibit 6.

Increasing exports of copper-based scrap have also reduced U.S. supplies of scrap and have caused a dramatic supply shortage. This shortage has been evidenced by (1) a switch in the use of copper cathode by brass mills that are able to accommodate such a change, (2) reduced consumption, and (3) decreased stocks of copper-based scrap in the United States. That consumers of copper-based scrap have, where possible, switched to copper cathode is a telling indicator of the extent of the shortage. Copper cathode generally sells at prices in excess of those for No. 1 copper scrap, and so mills generally will not normally replace scrap with cathode because that change increases input and production costs for these manufacturers. See Petition at 16. U.S. Geological Survey (“USGS”) data indicate that total U.S. consumption of copper-based scrap declined by 481,000 metric tons, or by 29.2 percent, from 1999 to 2003. See Exhibit 2. These data also indicate that stocks of copper-based scrap have declined from a level of 91,070 metric tons in 1999 to 66,520 MT in 2002. See Petition at 17 and Exhibit 6 (attached). A recent USGS report attributes declines in consumption to the “tight scrap supply and narrow discounts reported by the industry.” Id.

C. Exports Of Copper And Copper-Alloy Scrap Are The Primary Causes Of The Domestic Price Increase And Shortage

The increase in exports of copper-based scrap from 1999 to 2003 was 437,199 metric tons. This amount represents 90.9 percent of the overall decline in scrap consumption during this period, which was 481,000 metric tons. As such, declining U.S. scrap supplies have been largely attributable to increasing exports. Importantly, no other factor can be linked with the recent supply shortages. As noted in the petition, neither consumption by the brass mill industry, nor the U.S. market in general, has caused the recent supply shortages, because there was no indication during 1999-2003 of an increase in U.S. demand for copper-based scrap. See Petition at 18. In addition, shortages are not attributable to a decline in the amount of scrap material

generated in the United States, which fell only marginally (by 43,801 metric tons, or 2.2 percent) between 1999 and 2003. See Exhibit 2.

In addition, increased demand for exports of U.S. copper-based scrap has applied upward pressure on prices paid by U.S. consumers for the product. As noted in the petition, while the price of copper-based scrap is related to the cost of copper cathode, the discount at which copper-based scrap sells in relation to copper cathode is completely driven by the supply and demand of copper-based scrap. See Petition at 22. Significantly, between 2000 and 2003 the average discount for No. 1 copper scrap from the Comex cathode price declined by 63.3 percent, and the average discount for No. 2 copper scrap declined by 42.2 percent. This means that the price of copper scrap has been moving upward toward the higher-priced copper cathode and in some instances has actually exceeded the Comex price of copper cathode. Id. at 21. That the industry is experiencing increased prices during a downturn in the U.S. economy (when prices of copper-based scrap historically have fallen) indicates that these price trends are the result of increased exports, not increased U.S. consumption or declines in the amount of copper-based scrap generated within the U.S. market. See Petition at 23. The upward trend of copper-based scrap prices has been further exacerbated by the fact that agents purchasing on behalf of the Chinese industry are offering to pay above-market prices for the products. This practice is further evidence that the price increase has been largely, if not entirely, driven by the significant increase in exports.

D. The Domestic Copper And Brass Industry Has Been, And Will Continue To Be, Significantly Adversely Affected By Such Increased Prices And Shortages

The recent surge in exports of copper-based scrap from the United States has led to price increases and widespread supply shortages that have had, and will continue to have, significant adverse effects on the domestic copper and brass industry. To date, the industry has experienced

an overall increase in raw-material costs as mills have switched to higher-priced copper cathode and, where substitution has not been possible, have been forced to pay the high prices at which copper-based scrap has been available. These increasing raw-material costs have had an estimated annual impact of \$32,306,135 on the brass mill industry. See Petition at 28. If these trends continue, production interruptions in the brass industry will become widespread, and the adverse financial impact will be immense.

E. Export Controls Are Necessary To Protect The Domestic Economy From The Excessive Drain Of Scarce Materials And To Reduce The Serious Inflationary Impact From Foreign Demand

The unprecedented increase in exports from the United States of copper scrap and copper-alloy scrap and current supply shortages mandate a substantial and powerful response. The proposed volume-based annual quota would afford meaningful relief to the domestic industry and reduce export volumes and prices to levels that are representative of trends under historically typical circumstances. Indeed, given the nature of the copper-based scrap supply, which is largely unresponsive to price increases, strict controls on exports of copper-based scrap are the only means of retaining the U.S. scrap supply. See Petition at 34. Moreover, a monitoring program would complement the proposed quota by providing a means of tracking the volume and value of all exports of copper-based scrap, as well as the quality of this scrap and its origin within the United States.

F. Submission Of Updated And Additional Information

In order to further assist the Department in rendering a determination on the merits of the industry's petition, we provide the following updated and additional information: (1) the competitors' employment figures; (2) quantitative information characterizing the effects of copper-scrap exports on petitioners; (3) aggregated cost data of metal inputs used by the industry; (4) information on the global industry; (5) supplemental historical information

regarding the supply, prices, and exports of copper-based scrap; (6) revised prices for copper-based scrap and the impact of shortages on segments of the industry that exclusively utilize scrap; and (7) additional information regarding the likely effect of controls and monitoring on the price and availability of copper-based scrap. As demonstrated in more detail below, the additional data provided support the co-petitioners request for the imposition of export controls and monitoring.

II. RESPONSES TO THE DEPARTMENT'S SPECIFIC REQUESTS FOR INFORMATION

A. Economic Profile and Employee Information

Information describing the current economic profile of the members of the Copper & Brass Fabricators Council and the Non-Ferrous Founders' Society was provided in the petition filed on April 7, 2004. Currently, the total employment of the members of the CBFC is an estimated 14,145. Details as to the employment of individual CBFC members by production location are included at Exhibit 1. The Non-Ferrous Founders' Society places the current census of U.S. brass and bronze foundries at approximately 540 companies (of which roughly 100 companies are members of the NFFS) and estimates the total number of this industry's employees as approaching 40,000 workers.

B. Quantitative Information Characterizing the Effects of Copper Scrap Exports on the Petitioning Industries

Quantitative information characterizing the effects of copper-based scrap exports on petitioners was discussed at length in the petition. In summary, such data indicate that rising exports of copper-based scrap have reduced the supply of scrap available to U.S. consumers of the product, most notably the brass mill industry and brass and bronze foundries. Reductions in supply have led to significant increases in prices paid for copper-based scrap, most notably in the second half of 2003 and the initial months of 2004. Supply reductions have also made the

sourcing of copper-based scrap within the United States a major challenge and resulted in occasional production outages due to a lack of raw materials. Insufficient supply of copper-based scrap in the United States has also forced brass mills to increase their use of more-expensive copper cathode in place of copper-based scrap as an input material. The combined result of these developments has been large increases in the cost of raw materials to the industry.

Quantitative information that has been released since the filing of the petition indicates that these trends have continued into the months of 2004. The data of the Department of Commerce indicate that exports of copper scrap and copper-alloy scrap from the United States through the first two months of 2004 continued at extremely high levels. Total exports in January and February of 2004 were at all-time peaks in comparison to exports in those months in previous years, and were 6.9 percent higher than in the first two months of 2003. See Exhibits 4.

C. Data on the Materials Used in the Manufacturing Process for Brass Mill Products

By measure, the amount of copper cathode and copper-based scrap used by producers in the brass mill industry will vary, based on the specific output product being manufactured, the alloy composition of the product, the availability of materials, and the structure of the production process of an individual mill. Based on a survey of some of the largest consumers of copper and copper-based scrap in the brass mill industry, aggregated cost data indicate that metal inputs accounted for a clear majority of the cost of manufacturing of various representative products of the brass mill industry. As shown at Exhibit 7, in March 2003, metal inputs accounted for 71.9 percent of the brass mill industry's aggregate cost of manufacturing (COM); total energy costs accounted for 4.3 percent of COM; direct labor accounted for 5.9 percent of COM; other variable costs represented 8.2 percent of COM; fixed factory overhead accounted for 7.8 percent of COM; and other manufacturing costs accounted for 1.9 percent of COM.

As prices for copper-based scrap and copper cathode increased over the course of 2003 and into 2004, the portion of overall COM accounted for by metal costs within the industry jumped markedly. As of March 2004, total metal costs accounted for 81.9 percent of the total average cost of manufacturing; total energy costs accounted for 2.5 percent of COM; direct labor accounted for 4.1 percent of COM; other variable costs represented 5.9 percent of COM; fixed factory overhead accounted for 4.9 percent of COM; and other manufacturing costs accounted for 0.7 percent of COM. See Exhibit 7.

The metal inputs used in the production of the output products of the U.S. brass mill industry vary by product, producer, alloy, production process, and availability and relative price of the inputs. Based on a sample of producers across a variety of product types and alloys, a rough breakdown on the basis of input weight as of March 2004 is as follows: copper-alloy scrap, 38.5 percent; copper scrap, 29.5 percent; copper cathode, 22.1 percent; zinc, 9.4 percent; and lead, 0.6 percent.

The breakdown of metal inputs used by the industry in March 2004 reflects the relative scarcity and high cost of copper scrap and copper-alloy scrap that has held sway as a result of expanded exports of the products. The actual metal-usage figures noted above reflect significantly higher usage of copper cathode and significantly reduced use of scrap in relation to the industry's preferred "recipe" for metal inputs. Under circumstances of normal supply and demand, the preferred input volume of copper cathode for the cross-section of products examined would have been limited to 9.6 percent of the metal input by weight, as compared to the actual input usage of 22.1 percent. In contrast, under the preferred input recipe, copper-alloy scrap would have accounted for 46.3 percent of total metal inputs (as compared to actual usage of 38.5 percent of the total), and copper scrap would have accounted for 37.6 percent of the total

metal input weight (rather than the actual usage figure of 29.5 percent).¹ Thus, supply limitations and high scrap prices have pushed U.S. brass mills to adopt significantly sub-optimal metal input compositions. The movement toward copper cathode and away from copper-based scrap as an input material has resulted in increased costs for the domestic brass mill industry, as copper cathode sells at higher prices per pound than does copper-based scrap.

On the basis of costs incurred for the metal input used by the industry sample, total metal costs increased from 68.3 cents per pound of output product in March 2003 to \$1.174 per pound in March of 2004, an increase of 49.1 cents per pound, or 72.0 percent over the period. Of the total metal cost per pound of output in March 2004, an average of 35.9 percent was attributable to copper-alloy scrap inputs, 33.6 percent was attributable to copper scrap input costs, 26.1 percent represented costs for copper cathode, 4.1 percent was attributable to zinc costs, and 0.2 percent was attributable to the cost of lead inputs. See Exhibit 7.

In summary, increasing exports of copper-based scrap have pushed up raw materials costs incurred by the domestic brass mill industry in two ways. First, as supplies of scrap in the United States have tightened and agents of foreign producers have bid up prices to obtain those supplies, the prices paid by U.S. brass mills for copper-based scrap have increased. As outlined in the petition, declining scrap discounts (and, at times, premiums) for copper-based scrap in relation to Comex prices for copper cathode can be distinguished from the more general increases witnessed in the price of copper cathode and indicates the specific impact of increased exports of copper scrap and copper-alloy scrap on U.S. prices for these commodities.

¹ In relation to the remaining alloying elements, actual zinc input in March 2004 stood at 9.4 percent of the total metal used, as compared to a preferred portion of 6.1 percent and lead use changed marginally from 0.5 percent under the preferred recipe to 0.6 percent under the actual recipe estimation.

Second, the reduced supplies of copper-based scrap available to U.S. brass mills have forced these producers to source copper cathode in lieu of copper-based scrap. The results have been sub-optimal metal input “recipes” and higher input costs to source copper cathode in relation to traditionally less-expensive copper-based scrap.

D. The Impact of Exports on the Domestic Price of Products Containing Copper

As noted above, increased exports of copper-based scrap have resulted in increased prices for this scrap in the U.S. market and have forced the brass mill industry to turn its raw material sourcing away from copper-based scrap and toward copper cathode. Both of these developments have acted to increase the cost of manufacturing for the brass mill industry. While the industry has not been able to pass through all of its increased costs to purchasers of the finished products of the brass mill industry, there have been substantial price increases.

As prices paid for the output of the petitioning industries have increased, the users of those products have been placed at a competitive disadvantage. Added to other areas of relative cost disadvantage, such as labor and environmental costs incurred, many users of copper and copper-alloy products that further manufacture the input material into finished industrial and consumer products (such as brass hardware, for example) have made the decision to move their manufacturing operations overseas or simply to source elements of their product line from abroad. As a result, there are fewer users of products such as copper and brass sheet and strip and reduced domestic consumption of the product. Thus, as exports of copper-based scrap have increased and prices for the products made from the input material by the brass mill industry have increased, these shifts have provided added incentive for users of the materials to cease domestic production.

Further, increased prices for finished products of copper and copper alloys have encouraged users of these products to find products made from other raw materials to act as

substitutes for the copper and copper-alloy products. For example, a contractor may choose to substitute plastic water tube for copper water tube as the relative cost disparity of the products increases.

E. Information on the Global Copper Industry

The most significant development in the global copper industry in relation to supply and demand in recent years has been the unprecedented and dramatic growth of China as a consumer of copper cathode and copper-based scrap. According to the U.S. Geological Survey, China's apparent use of copper units increased by 400,000 metric tons, or 16 percent, in the single year of 2002. USGS Copper Annual at 7. Indeed, as of that year, China surpassed the United States to become the world's largest consumer of refined copper (as recently as 1999, U.S. consumption of refined copper was nearly twice as large as that of China), based on CRU International data. Because China has limited copper reserves and mining capabilities, essentially all growth in copper consumption within the country must come through expanded imports of forms such as copper concentrates, copper cathode, and copper-based scrap.

In point of fact, the most important element of the growth of China's copper raw materials has been imports of copper-based scrap. According to information provided by China Minmetals Nonferrous Metals Co., Ltd., the average rate of growth in China's imports of copper-based scrap from 1990 to 2002 was 52 percent.² Chinese imports of copper-based scrap in 2002 totaled 3.08 million metric tons, with 79 percent of those import originating in North America (primarily the United States). The Minmetals information notes that rapidly increasing imports of copper-based scrap into China were meant to alleviate a "severe shortage of copper resources"

² "Copper Scrap: Import & Utilization in China," by Gu Liangmin, Special Presentation for Metal Bulletin Seminar, Shanghai, Nov. 12, 2003. See Exhibit 8.

and that the use of these imports allowed Chinese producers to avoid the “high premium for copper cathode” that acts to “squeeze the production cost.” Id. The report continues that one of the problems engendered by China’s rapid expansion of copper-based scrap imports has been “crazy purchasing in the market (especially in US).”

China’s strategy of relying upon imports of copper-based scrap as a main source of copper input materials is indicated by the country’s relative imports of copper cathode and copper-based scrap. According to Minmetals, China imported 1.16 million metric tons of copper cathode in 2002, as compared to 3.08 million metric tons of copper-based scrap. This pattern of imports stands in notable contrast to the pattern shown in the United States. According to the import statistics of the Department of Commerce, in 2003 the United States imported 836,419 metric tons of copper cathode, as compared to just 90,581 metric tons of copper-based scrap. In other words, while imports of copper-based scrap into the United States are only about 11 percent as large as U.S. imports of copper cathode, imports by China of copper-based scrap are nearly three times larger than imports by China of copper cathode.

Clearly, the expansion of China’s copper industry has hinged on expanded imports of copper-based scrap. Reflecting this growth, as outlined in the petition, U.S. exports of copper-based scrap to China grew by 515 percent between 1999 and 2003, and by 61 percent in the single year from 2002 to 2003. See Petition Exhibit 7. There is every reason to believe that China’s copper industry will continue to grow in years to come. Unless restrictions on U.S. exports of copper-based scrap are put into place, the raw materials needed to feed China’s expansion will be sourced from the United States, and the result will be ongoing supply shortages of scrap in the U.S. market and continued high prices for the domestic brass mill industry and other users of the product.

F. **Historical Information Concerning Supply, Demand, Prices and Exports of Copper Cathode and Copper-Based Scrap**

Historical information concerning supply and demand for copper-based scrap, exports, and prices was provided in the petition for the period from 1999 through 2003. The relevant exhibits from the petition have been supplemented in response to the specifics of the Department's request to include information from 1996 through 1998 and the first two months of 2004. The supplemental data show that U.S. exports of copper-based scrap in the years 1996-1998 never exceeded 400,000 metric tons annually, levels far below those in any year from 2000 through 2003. See Exhibit 2. As a percentage of the total U.S. supply of copper-based scrap, exports ranged from 15.2 to 19.6 percent in the 1996-1998 period, as contrasted with 28.9 to 39.6 percent in the period from 2001 through 2003. U.S. imports of copper-based scrap were in constant decline from 1996 (when they totaled 212,134 metric tons) to 2003 (a total of 90,581 metric tons). Id.

Total U.S. consumption of copper-based scrap increased from 1996 to 1997 before declining during 1998 and 1999. In contrast to overall U.S. copper-based scrap consumption, consumption by the combined brass mill/wire rod mill industry expanded in every year from 1996 through 2000. Id. Brass mill and wire rod mill consumption of copper-based scrap then declined significantly from 2000 forward, dropping by 231,000 metric tons, or 21.6 percent, between 2000 and 2003. This decline occurred concurrently with an expansion of U.S. exports of copper-based scrap of 259,257 metric tons. Id.

Average annual U.S. prices for copper cathode, as tracked by Comex, declined in each year from 1996 through 1999. Indeed, it would not be until 2004 that Comex cathode prices would reach levels last seen in 1996. Significantly, however, at the time of the previous peaks in the Comex price for copper cathode, the discounts of Number 1 copper scrap in relation to

Comex were far greater than those seen in more recent years. Thus, in 1996, Number 1 copper scrap averaged a discount of 4.34 cents per pound (4.10 percent) in relation to the Comex cathode price. See Exhibit 2. In 1997, this discount averaged 4.00 cents (3.86 percent). Id. By way of contrast, in 2002, Number 1 copper scrap's discount was reduced to an average of 1.44 cents per pound under Comex (2.01 percent). By 2003, that discount fell to an average of just 1.19 cent per pound (1.47 percent). These price increases in 2002 and 2003 for copper scrap (declines in average discounts of copper scrap in relation to the Comex price for copper cathode) are all the more striking in that they took place during a period of weak U.S. demand for copper-based scrap, both in the aggregate and in relation to brass and wire rod mills in their own right, due to the generally slow, depressed U.S. economy during those years. Clearly, increased exports, not expanded U.S. consumption, resulted in the increased prices for copper-based scrap in the period 2002-2003 (and into 2004).

G. Information on Any Factors, Other Than Exports, That May Have Contributed to Domestic Shortages and Increased Prices for Copper Scrap

As outlined in the petition, there are no factors other than exports that serve to explain domestic shortages and increased prices for copper-based scrap in the United States. While prices for copper-based scrap clearly are related to prices for copper cathode as reflected in the Comex and LME exchange prices, the fluctuation of copper-based scrap discounts in relation to copper cathode prices occurs in response to supply and demand conditions specifically for copper-based scrap in the U.S. market and can, therefore, be distinguished from broader fluctuations in the price of copper.

As noted above and in detail in the petition, were it not for increased exports of copper-based scrap from the U.S. market in the period between 1999 and 2003, there would have been sufficient supplies of copper-based scrap to satisfy domestic demand for the product. U.S.

consumption of copper-based scrap in no way accounts for shortages of the product during this period, because such consumption declined in each year from 1999 through 2003. Id. Further, total U.S. supply of scrap (consumption plus export volumes) declined only slightly (2.2 percent) from 1999 to 2003. Thus, trends in overall supply and U.S. consumption of copper-based scrap do not account for the supply shortage in the U.S. market in recent years. Rather, growing exports, which expanded their share of the total supply of U.S. copper-based scrap from 16.2 percent in 1999 to 39.6 percent in 2003, have caused the supply shortages that have affected U.S. consumers of the product so dramatically during this period.

H. The Effect That Copper-Based Scrap Shortages Have Had On Segments of the Industry That Utilize Scrap Exclusively

By and large, the effects of copper-based scrap shortages on those brass mills that rely on scrap exclusively for their input materials have come down to price. Indeed, since the time of the filing of the petition, data have become available that show that prices for copper scrap have reached unprecedented levels recently. Prices for Number 1 copper scrap increased above a monthly average of \$1.00 per pound by January 2004. See Exhibit 6. From January into the first week of May 2004, prices for Number 1 copper scrap ranged from \$1.16 to \$1.36 per pound and averaged \$1.28 per pound. Id. While the differential between Number 1 copper scrap prices and Comex cathode prices initially began to increase, rising from an average of 1.35 cents per pound in January 2004 to 1.78 cents per pound in February 2004, that discount fell back to 1.70 cents in March and 1.09 cents per pound in April of 2004. Id.

Even as the primary impact of scrap shortages has been on price, individual producers have reported short-term production shutdowns as well. One brass mill producer reports that, through the first three months of 2004, delays in sourcing input material resulted in a cumulative equivalent of 11 days of lost production. It has also been reported that excessive demand for

U.S. scrap and numerous offers of cash payments for scrap, particularly by agents acting on behalf of Chinese producers, have prompted suppliers of copper-based scrap to tighten credit terms to U.S. customers. This move toward cash-only sales by these suppliers acts as another form of price increase imposed on members of the U.S. brass mill industry.

I. Information on the Trade and Other Practices of Other Countries That Have a Direct Impact on the U.S. Copper Industry's Ability to Compete Globally

See responses at sections II.D and II.E above.

J. Comments Regarding the Effectiveness of the Requested Monitoring and Export Controls

See response at section II.K below.

K. Economic Analyses of the Likely Effect of Export Monitoring and Export Controls on the Price and Availability of Copper-Based Scrap

As discussed in the petition, it is the firm belief of the co-petitioners that a strong quota on exports of copper-based scrap, in conjunction with an export monitoring system, is essential to remedy the supply shortages that have been engendered by the massive increases in U.S. exports in recent years. It is the estimate of CRU International that there will be an ongoing and more severe shortcoming of global refined copper production in relation to demand in 2004 than was the case in 2003. Thus, ongoing tight supplies and high prices for copper cathode will continue to encourage the Chinese copper industry to use U.S. copper-based scrap as an important means of supplementing supply.

In contrast to copper concentrates and copper cathode, production of which can be increased over time in response to growing demand, the supply of copper-based scrap is not dramatically changed by increased prices. Thus, there is a relatively finite supply of copper-based scrap in the United States, and a reduction in demand for the product, specifically foreign demand for U.S. exports, is the only means available for bringing supply and demand back into

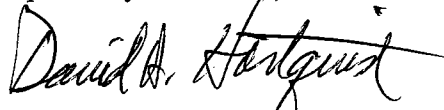
balance for U.S. purchasers of the product. For that reason, the quota remedy requested by petitioners, which would allow exports to reach the 1996-2000 average annual level of 380,130 metric tons, is an effective means of overcoming the surge in exports of copper-based scrap, most notably to China, that has taken place in the 2001-2004 period.

III. CONCLUSION

The foregoing evidence indicates, quite clearly, that exports of copper scrap and copper-alloy scrap to China have taken a significant toll on the U.S. copper and brass industry and U.S. brass and bronze foundries. The detrimental impact on the U.S. industry has been characterized by a prolonged period of scarce supply and expensively-priced scrap, when it can be obtained. Under the circumstances, the proposed export controls and monitoring of exports that are being requested will provide meaningful relief that is desperately needed by co-petitioners and their member companies.

We appreciate the opportunity to provide the Department with these additional comments and information. Should you have any questions, please do not hesitate to contact the undersigned.

Respectfully submitted,



DAVID A. HARTQUIST
JEFFREY S. BECKINGTON
JENNIFER E. MCCADNEY
COLLIER SHANNON SCOTT, PLLC
3050 K Street, N.W., Suite 400
Washington, DC 20007
(202) 342-8400

Counsel to the Copper & Brass Fabricators
Council, Inc., and Its Member Companies and the
Non-Ferrous Founders' Society and Its Member
Companies

ECONOMIC CONSULTANTS:

MICHAEL T. KERWIN
GEORGETOWN ECONOMIC SERVICES, LLC
3050 K Street, N.W.
Washington, D.C. 20007
(202) 945-6660

Dated: May 13, 2004

EXHIBIT 1

Exhibit 1
Member Companies of the Copper & Brass Fabricators Council,
U.S. Production Locations, and Employees

Company Name	City & State	# of Employees
Ansonia Copper & Brass, Inc.	Ansonia, CT	380
Brush Wellman, Inc.		
Brush Engineered Materials, Inc.	Cleveland, OH	145
Brush Wellman, Inc.	Elmore, OH	635
Brush Wellman, Inc.	Shoemakersville, PA	177
Cambridge-Lee Industries, Inc.	Reading, PA	730
Cerro Copper Products Co.		
Cerro Copper Products Co.	Sauget, IL	650
Cerro Copper Products Co.	Shelbina, MO	240
Cerro Copper Western Division	Cedar City, Utah	50
Cerro Copper Casting Company	Mexico, MO	40
Cerro Copper Tube Company	Bossier City, LA	50
Cerro Metal Products Co.	Bellefonte, PA	825
Cerro Metal Products Co.	Weyers Cave, VA	273
Chicago Extruded Metals Company		
Chicago Extruded Metals Company	Chicago, IL	10
Chicago Extruded Metals Company	Cicero, IL	220
Chicago Extruded Metals Company	Dolton, IL	6
Drawn Metal Tube Company		
Drawn Metal Tube Company	Thomaston, CT	40
American Unibrass	Thomaston, CT	12
Lewis Brass & Copper Company, Inc.	Middle Village, NY	21
Extruded Metals	Belding, MI	270
Heyco Metals, Inc.		
Heyco Metals, Inc.	Reading, PA	76
Heyco Metals, Inc.	Ontario, CA	14
Heyco Metals, Inc.	Tom's River, NJ	100

Company Name	City & State	# of Employees
Hussey Copper Ltd.		
Hussey Copper Ltd.	Leetsdale, PA	620
Hussey Copper Ltd.	Eminence, KY	180
KobeWieland Copper Products, LLC	Pine Hall, NC	452
Metals America	Shelby, NC	68
The Miller Company	Meriden, CT	159
Mueller Industries, Inc.		
Mueller Industries, Inc.	Memphis, TN	125
Mueller Brass Company	Port Huron, MI	500
Mueller Copper Tube Company	Fulton, MS	468
Mueller Copper Tube Products, Inc.	Wynne, AR	732
Mueller Refrigeration Company	Hartsville, TN	210
Mueller Fitting Company	Covington, TN	239
Precision Tube Company, Inc.	North Wales, PA	300
Olin Corporation		
Olin Corporation - Brass Group	East Alton, IL	1,755
Bryan Metals	Bryan, OH	50
Olin Fabricated Metal Products, Inc.	Bloomington, IL	81
Olin Corporation Headquarters	Norwalk, CT	237
Olin Fineweld Tube	Cuba, MO	27
Somers Thin Strip	Waterbury, CT	181
Chase Brass & Copper Co., Inc.	Montpelier, OH	270
Chase Brass & Copper Co., Inc.	Los Angeles, CA	250
Waterbury Rolling Mills, Inc.	Waterbury, CT	100
Outokumpu American Brass	Buffalo, NY	891
PMX Industries, Inc.	Cedar Rapids, IA	425
Revere Copper Products, Inc.		
Revere Copper Products, Inc.	Rome, NY	575
Revere Copper Products, Inc.	New Bedford, MA	185
Wieland Metals, Inc.	Wheeling, IL	101

TOTAL NUMBER OF EMPLOYEES =

14,145

EXHIBIT 2

Exhibit 2

U.S. Copper-Based Scrap Consumption, Exports, and Imports as a Percentage of Total Supply and Consumption and Copper Cathode and No. 1 Scrap Prices, 1996-2003 (in Metric Tons, Gross Weight and Cents per Pound)

	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>% Change 1996-2003</u>
Total Scrap Consumption									
Smelters/Refiners	655,000	693,000	644,000	501,000	440,000	371,000	240,000	224,000	-65.8%
Brass/Wire Rod Mills	909,000	1,010,000	1,020,000	1,050,000	1,070,000	919,000	930,000	839,000	-7.7%
Foundries/Misc. Manuf.	<u>61,300</u>	<u>62,700</u>	<u>58,100</u>	<u>79,900</u>	<u>83,000</u>	<u>87,500</u>	<u>86,900</u>	<u>86,900</u>	41.8%
TOTAL CONSUMPTION	1,625,300	1,765,700	1,722,100	1,630,900	1,593,000	1,377,500	1,256,900	1,149,900	-29.2%
U.S. Scrap Exports	397,407	383,742	308,920	316,342	494,284	559,699	566,838	753,541	89.6%
Total U.S. Scrap Supply	2,022,707	2,149,442	2,031,020	1,947,242	2,087,284	1,937,199	1,823,738	1,903,441	-5.9%
Exports as % of Supply	19.6%	17.9%	15.2%	16.2%	23.7%	28.9%	31.1%	39.6%	19.9%
Exports as % of Consumption	24.5%	21.7%	17.9%	19.4%	31.0%	40.6%	45.1%	65.5%	41.1%
Exports as % of Brass/Wire Rod Mill Consumption	43.7%	38.0%	30.3%	30.1%	46.2%	60.9%	61.0%	89.8%	46.1%
U.S. Scrap Imports	212,134	211,728	165,698	136,195	143,690	114,712	100,110	90,581	-57.3%
Imports as % of Supply	10.5%	9.9%	8.2%	7.0%	6.9%	5.9%	5.5%	4.8%	-5.7%
Prices (cents/pound):									
COMEX, First Position	105.87	103.58	75.08	72.11	83.97	72.57	71.67	81.05	-23.4%
Brass Mills No. 1 Scrap	101.53	99.58	73.55	70.88	80.67	69.57	70.23	79.86	-21.3%
Differential	4.34	4.00	1.53	1.23	3.30	3.00	1.44	1.19	-72.6%
Differential as % of COMEX	4.10%	3.86%	2.04%	1.71%	3.93%	4.13%	2.01%	1.47%	

Source: U.S. Geological Survey Minerals Yearbook: Copper, 1997-2002 Table 10 and December 2003 Mineral Industry Survey Table 10. 2003 Foundries/Misc. Manuf. Consumption estimated as equal to 2002 figure. Exports and imports from U.S. Department of Commerce.

EXHIBIT 3

Exhibit 3
U.S. Total Exports of Copper and Copper Alloy Waste and Scrap (HTS 7404.00), 1999-2003
1999-2003 and Year to Date, 2003 and 2004
Volume in Metric Tons, Value in \$1000, Average Unit Value in \$/kg:

	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>Jan.-Feb 2003</u>	<u>Jan.-Feb 2004</u>	<u>% Change 1999-2003</u>	<u>% Change 2002-2003</u>	<u>% Change, YTD 2003-2004</u>
<u>Export Volume</u>										
China	86,601	214,162	316,739	332,110	532,901	67,678	77,837	515.4%	60.5%	15.0%
Korea	42,824	60,821	42,165	33,711	41,086	7,261	7,948	-4.1%	21.9%	9.5%
Canada	67,678	86,792	71,886	40,341	39,136	6,160	5,147	-42.2%	-3.0%	-16.4%
India	28,757	28,275	36,218	47,424	50,986	6,770	5,400	77.3%	7.5%	-20.2%
Japan	20,174	32,322	27,013	20,164	15,960	3,657	1,768	-20.9%	-20.8%	-51.7%
All Others	70,308	71,912	65,678	93,088	73,472	13,008	13,672	4.5%	-21.1%	5.1%
Total Export Volume	316,342	494,284	559,699	566,838	753,541	104,534	111,772	138.2%	32.9%	6.9%
<u>Export Value</u>										
China	74,278	169,678	257,747	269,234	457,771	57,790	76,724	516.3%	70.0%	32.8%
Korea	53,542	87,076	62,461	46,954	58,243	10,331	12,853	8.8%	24.0%	24.4%
Canada	75,381	107,702	84,884	44,761	44,515	7,530	6,761	-40.9%	-0.5%	-10.2%
India	26,630	24,199	27,823	38,740	43,912	6,011	5,818	64.9%	13.4%	-3.2%
Japan	41,446	63,812	69,411	30,387	25,446	5,969	3,261	-38.6%	-16.3%	-45.4%
All Others	95,836	92,345	53,468	120,878	86,120	17,719	18,205	-10.1%	-28.8%	2.7%
Total Export Value	367,113	544,812	555,794	550,954	716,007	105,350	123,622	95.0%	30.0%	17.3%
<u>Average Unit Value</u>										
China	\$ 0.86	\$ 0.79	\$ 0.81	\$ 0.81	\$ 0.86	\$ 0.85	\$ 0.99	0.2%	6.0%	15.4%
Korea	\$ 1.25	\$ 1.43	\$ 1.48	\$ 1.39	\$ 1.42	\$ 1.42	\$ 1.62	13.4%	1.8%	13.7%
Canada	\$ 1.11	\$ 1.24	\$ 1.18	\$ 1.11	\$ 1.14	\$ 1.22	\$ 1.31	2.1%	2.5%	7.5%
India	\$ 0.93	\$ 0.86	\$ 0.77	\$ 0.82	\$ 0.86	\$ 0.89	\$ 1.08	-7.0%	5.4%	21.3%
Japan	\$ 2.05	\$ 1.97	\$ 2.57	\$ 1.51	\$ 1.59	\$ 1.63	\$ 1.84	-22.4%	5.8%	13.0%
All Others	\$ 1.36	\$ 1.28	\$ 0.81	\$ 1.30	\$ 1.17	\$ 1.36	\$ 1.33	-14.0%	-9.7%	-2.2%
Total Export Volume	\$ 1.16	\$ 1.10	\$ 0.99	\$ 0.97	\$ 0.95	\$ 1.01	\$ 1.11	-18.1%	-2.2%	9.7%

Source: U.S. Department of Commerce, U.S. Total Exports.

EXHIBIT 4

Exhibit 4
U.S. Exports of Copper Waste and Scrap by Month, Including Quarterly and Annual Averages, 1999-February 2004
in Metric Tons

	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>1Q Ave.</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>2Q Ave.</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>3Q Ave.</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>4Q Ave.</u>	<u>Annual Ave.</u>
1999	20,742	24,690	29,369	24,934	26,698	26,270	24,045	25,671	25,534	24,993	25,688	25,405	26,881	28,661	32,772	29,438	26,362
2000	36,451	35,151	35,534	35,712	37,654	39,295	38,780	38,576	39,506	51,558	43,641	44,902	46,243	44,755	45,717	45,572	41,190
2001	42,604	47,402	52,316	47,441	46,379	48,012	49,718	48,036	49,635	44,041	41,988	45,221	52,025	41,122	44,455	45,867	46,641
2002	38,577	44,906	50,528	44,670	47,330	49,151	47,744	48,075	44,597	49,050	43,242	45,630	43,397	55,378	52,937	50,571	47,236
2003	48,931	55,603	62,268	55,601	60,214	63,799	63,572	62,528	63,436	67,889	61,703	64,343	71,116	72,782	62,229	68,709	62,795
2004	51,903	59,869															
% Change, 1999-03	135.9%	125.2%	112.0%	123.0%	125.5%	142.9%	164.4%	143.6%	148.4%	171.6%	140.2%	153.3%	164.6%	153.9%	89.9%	133.4%	138.2%
% Change, 2002-03	26.8%	23.8%	23.2%	24.5%	27.2%	29.8%	33.2%	30.1%	42.2%	38.4%	42.7%	41.0%	63.9%	31.4%	17.6%	35.9%	32.9%
% Change, 2003-04	6.1%	7.7%															

Source: U.S. Department of Commerce, U.S. Total Exports.

EXHIBIT 5

Exhibit 5
Disaggregated Exports of Copper and Copper Alloy Waste and Scrap,
1999-2003 and Year to Date 2003 and 2004, in Metric Tons

	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>Jan.-Feb.</u> <u>2003</u>	<u>Jan.-Feb.</u> <u>2004</u>	<u>% Change</u> <u>1999-2003</u>	<u>% Change</u> <u>2002-2003</u>	<u>% Change, YTD</u> <u>2003-2004</u>
7404.00.0020	128,511	232,064	284,043	257,560	366,463	52,871	51,476	185.2%	42.3%	-2.6%
China	51,416	127,468	177,139	166,512	275,267	37,255	36,459	435.4%	65.3%	-2.1%
% of Total	40.0%	54.9%	62.4%	64.6%	75.1%	70.5%	70.8%			
7404.00.0045	38,608	68,469	68,138	55,529	78,437	12,437	10,767	103.2%	41.3%	-13.4%
China	12,445	31,936	30,948	17,066	37,301	5,846	5,229	199.7%	118.6%	-10.6%
% of Total	32.2%	46.6%	45.4%	30.7%	47.6%	47.0%	48.6%			
7404.00.0062	14,966	24,856	32,893	45,029	51,933	6,708	7,385	247.0%	15.3%	10.1%
China	1,335	4,816	16,433	27,411	38,315	4,606	5,789	2770.0%	39.8%	25.7%
% of Total	8.9%	19.4%	50.0%	60.9%	73.8%	68.7%	78.4%			
7404.00.0080	134,258	168,894	174,625	208,720	256,708	32,518	42,144	91.2%	23.0%	29.6%
China	21,406	49,942	92,218	121,122	182,018	19,971	30,360	750.3%	50.3%	52.0%
% of Total	15.9%	29.6%	52.8%	58.0%	70.9%	61.4%	72.0%			
Total Copper Alloy Waste and Scrap	187,832	262,219	275,656	309,278	387,078	51,663	60,296	106.1%	25.2%	16.7%
China	35,186	86,694	139,599	165,599	257,634	30,423	41,378	632.2%	55.6%	36.0%
% of Total	18.7%	33.1%	50.6%	53.5%	66.6%	58.9%	68.6%			
Total Copper-Based Waste and Scrap	316,343	494,283	559,699	566,838	753,541	104,534	111,772	138.2%	32.9%	6.9%
China	86,602	214,162	316,738	332,111	532,901	67,678	77,837	515.3%	60.5%	15.0%
% of Total	27.4%	43.3%	56.6%	58.6%	70.7%	64.7%	69.6%			

Source: U.S. Department of Commerce, U.S. Total Exports.

EXHIBIT 6

Exhibit 6
Copper Scrap and Comex Cathode Prices and Differentials, Annual Averages 1998-2003,
Monthly Averages 2002-2004, and Weekly Samples February - May 2004 (in cents per pound)

	<u>No. 1 Scrap</u>	<u>Comex Cathode</u>	<u>Differential</u>	<u>No. 2 Scrap</u>	<u>Comex Cathode</u>	<u>Differential</u>
1998	73.55	75.08	1.53	60.19	75.08	14.89
1999	70.88	72.11	1.23	57.53	72.11	14.58
2000	80.67	83.97	3.30	64.99	83.97	18.98
2001	69.62	72.57	2.95	58.96	72.57	13.61
2002	70.23	71.67	1.44	59.45	71.67	12.22
2003	79.86	81.05	1.19	70.15	81.05	10.90
2002 Jan.	67.12	69.79	2.67	55.62	69.79	14.17
Feb.	69.45	72.23	2.78	57.29	72.23	14.94
Mar.	72.19	74.52	2.33	59.76	74.52	14.76
Apr.	71.82	73.11	1.29	54.00	73.11	19.11
May	71.98	73.22	1.24	60.39	73.22	12.83
Jun.	74.78	76.23	1.45	71.28	76.23	4.95
Jul.	71.91	72.33	0.42	61.04	72.33	11.29
Aug.	66.89	67.82	0.93	55.64	67.82	12.18
Sep.	66.80	67.71	0.91	55.68	67.71	12.03
Oct.	66.83	68.16	1.33	56.70	68.16	11.46
Nov.	71.38	72.57	1.19	60.50	72.57	12.07
Dec.	71.60	72.38	0.78	61.31	72.38	11.07
2003 Jan.	73.67	75.37	1.70	62.38	75.37	12.99
Feb.	75.55	76.96	1.41	63.95	76.96	13.01
Mar.	74.69	75.72	1.03	64.26	75.72	11.46
Apr.	70.82	72.18	1.36	61.80	72.18	10.38
May	73.95	75.05	1.10	64.53	75.05	10.52
Jun.	76.29	76.93	0.64	67.36	76.93	9.57
Jul.	73.86	78.06	4.20	65.00	78.06	13.06
Aug.	79.48	80.00	0.52	69.43	80.00	10.57
Sep.	81.96	81.84	(0.12)	72.75	81.84	9.09
Oct.	87.09	88.10	1.01	77.89	88.10	10.21
Nov.	92.22	92.68	0.46	82.81	92.68	9.87
Dec.	98.76	99.73	0.97	89.69	99.73	10.04
2004 Jan.	108.80	110.15	1.35	98.38	110.15	11.77
Feb. 5	116.50	117.25	0.75	106.00	117.25	11.25
Feb. 12	123.00	124.25	1.25	111.00	124.25	13.25
Feb. 19	130.00	132.80	2.80	118.00	132.80	14.80
Feb. 26	132.50	134.80	2.30	121.00	134.80	13.80
Monthly Ave.	125.50	127.28	1.78	114.00	127.28	13.28
Mar. 4	129.00	131.75	2.75	118.00	131.75	13.75
Mar. 11	132.00	133.55	1.55	118.00	133.55	15.55
Mar. 18	136.00	136.95	0.95	121.50	136.95	15.45
Mar. 25	133.00	134.55	1.55	114.00	134.55	20.55
Monthly Ave.	132.50	134.20	1.70	117.88	134.20	16.33
Apr. 1	136.00	137.10	1.10	117.00	137.10	20.10
Apr. 8	129.00	131.25	2.25	110.00	131.25	21.25
Apr. 15	129.00	129.45	0.45	109.50	129.45	19.95
Apr. 22	122.50	122.95	0.45	117.5	122.95	5.45
Apr. 29	118.00	119.20	1.20	97.00	119.20	22.20
Monthly Ave.	124.63	125.71	1.09	108.50	125.71	17.21
May 6	123.50	123.85	0.35	103.00	123.85	20.85

Source: US Geological Survey Copper Annual Table 13 (scrap) and Table 12 (Comex high grade first position cathode price); USGS Monthly Mineral Industry Surveys Tables 12 and 13; and American Metal Market (daily Nonferrous Scrap Prices and Market Guide, Comex Spot Price). No. 1 copper scrap prices are estimated buying prices for carload lots for brass mill scrap. No. 2 scrap prices are estimated buying prices for carload lots for refiners' copper scrap.

EXHIBIT 7

Exhibit 7
U.S. Brass Mill Costs of Manufacturing per Pound of Output Product,
Monthly Averages for March 2003 and March 2004

<u>Cost Element</u>	March 2003			March 2004		
	<u>Cost in \$/lb. of Output</u>	<u>% of Total COM</u>	<u>% of Total Metal Cost</u>	<u>Cost in \$/lb. of Output</u>	<u>% of Total COM</u>	<u>% of Total Metal Cost</u>
Copper-Alloy Scrap	0.277	29.2%	40.6%	0.422	29.4%	35.9%
Copper Scrap	0.181	19.0%	26.4%	0.395	27.6%	33.6%
Copper Cathode	0.187	19.7%	27.4%	0.307	21.4%	26.1%
Zinc	0.036	3.8%	5.3%	0.048	3.4%	4.1%
Lead	0.001	0.2%	0.2%	0.003	0.2%	0.2%
Total Metal Costs	0.683	71.9%		1.174	81.9%	
Electricity	0.019	2.0%		0.018	1.3%	
Natural Gas	0.018	1.9%		0.013	0.9%	
Other Energy	0.004	0.4%		0.004	0.3%	
Direct Labor	0.056	5.9%		0.059	4.1%	
Other Variable Costs	0.078	8.2%		0.084	5.9%	
Fixed Factory Overhead	0.074	7.7%		0.071	4.9%	
Other Costs of Manufacturing	0.018	1.9%		0.011	0.7%	
Total Non-Metal Costs	0.267	28.1%		0.259	18.1%	
Total Cost of Manufacturing	0.949	100.0%		1.434	100.0%	

Source: Internal industry cost information.

EXHIBIT 8

Gu Lianmin
Minmetals Copper Department

Copper scrap imports and utilisation in China



Special Presentation for



"Metal Bulletin Seminar"
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Copper Scrap: Import & Utilization in China

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Gu Liangmin

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China Minmetals Nonferrous Metals Co., Ltd.



1. Current Status of Copper Scraps Import
2. Utilisation of Copper Scrap
3. Government Policy & Regulations on Import of Copper Scrap
4. About Minmetals & CMN
5. Market Gossips



1. Current Status of Copper Scrap Import

- (1) Statistics & Analysis
- (2) Market Participation
- (3) Reason for import growth

2. Utilization of Copper Scrap

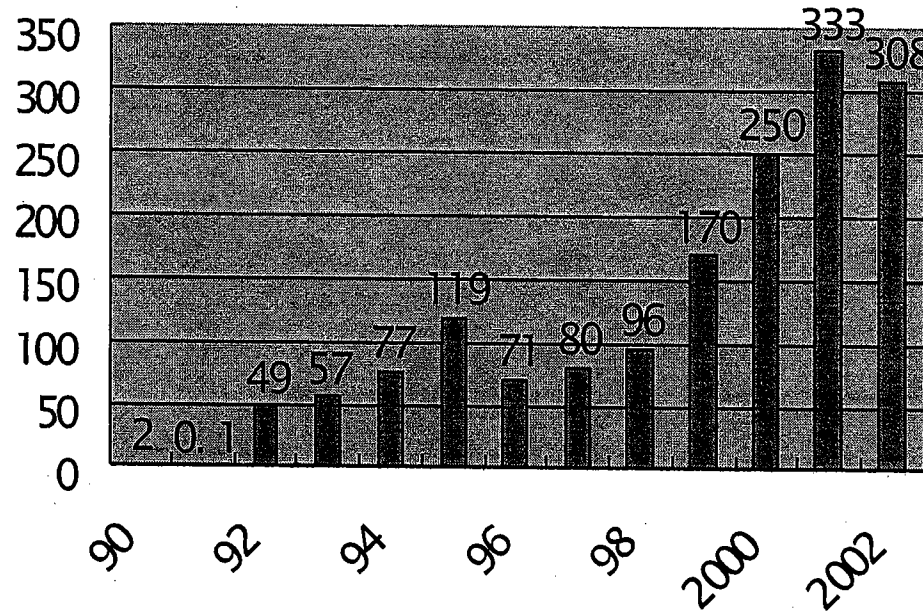
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Copper Scrap Imports 1990 — 2002
(in quantity of 10,000mt)

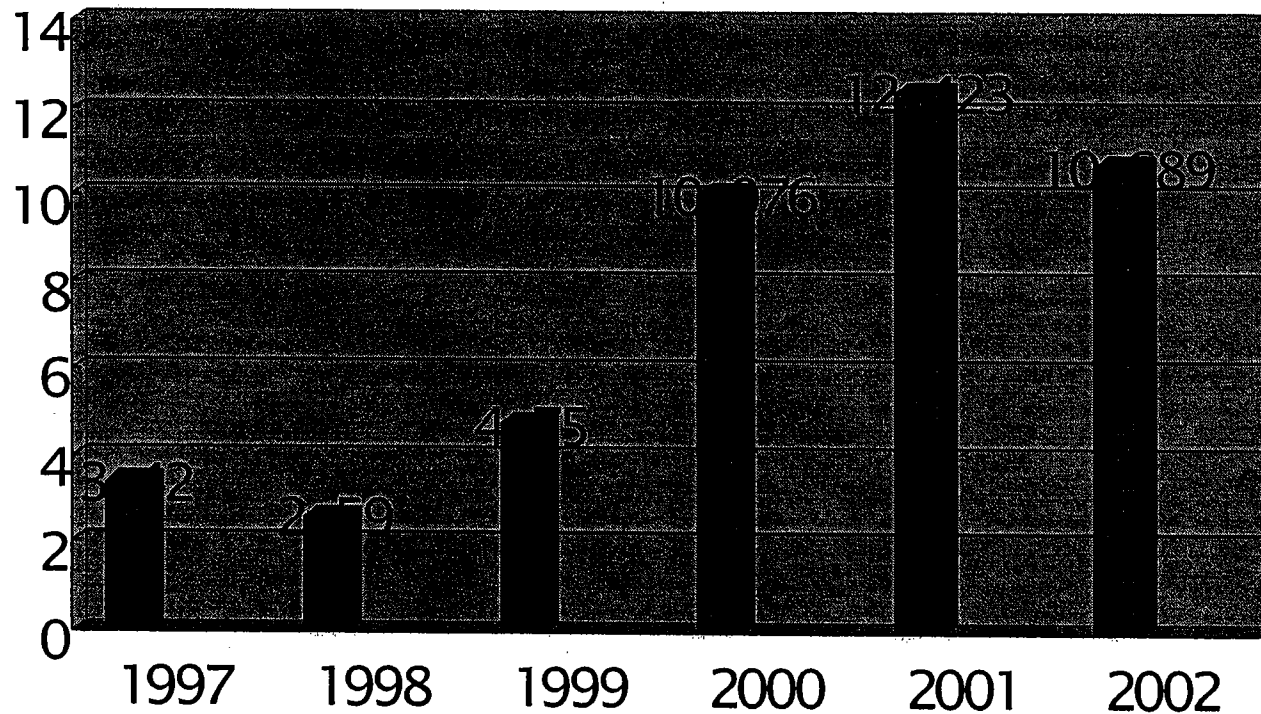




- (1) A healthy and strong growth in import of copper scraps
- (2) Total import in 2002: 3.08 million mt,
150 times of 1990
- (3) Average annual growth rate over last 12 years:
52%



Copper Scrap Imports 1997 —2002:
(in amount of US\$100 million)





Copper Scrap total import amount in 2002:

\$10.689 billion, \$347/mt

LME annual average settlement price in 2002 :

\$1559/mt

Estimated copper content:

22% (Copper: 600,000 mt)

Majority import copper scrap:

No.7 Category scrap

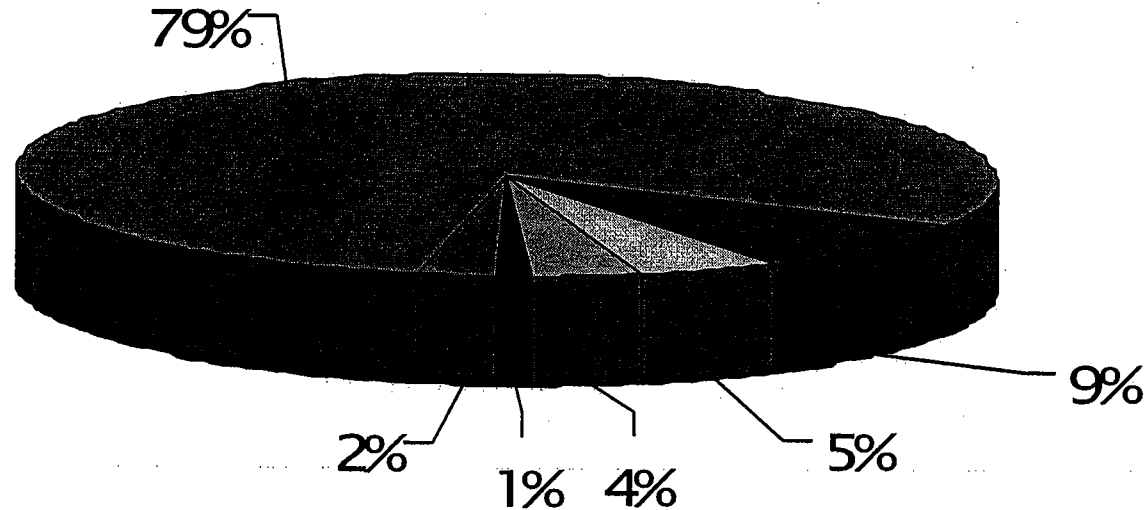
Estimated percentage of No.1/No.2/Brass Scraps:

10% of total import

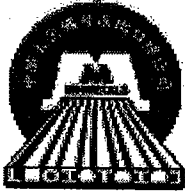


Copper Scrap Import by Country of Origin

(Data: Minmetals Import)



■ North America	■ Europe	■ Middle East
■ Australia	■ Japan	■ other area



Market Participation (2)

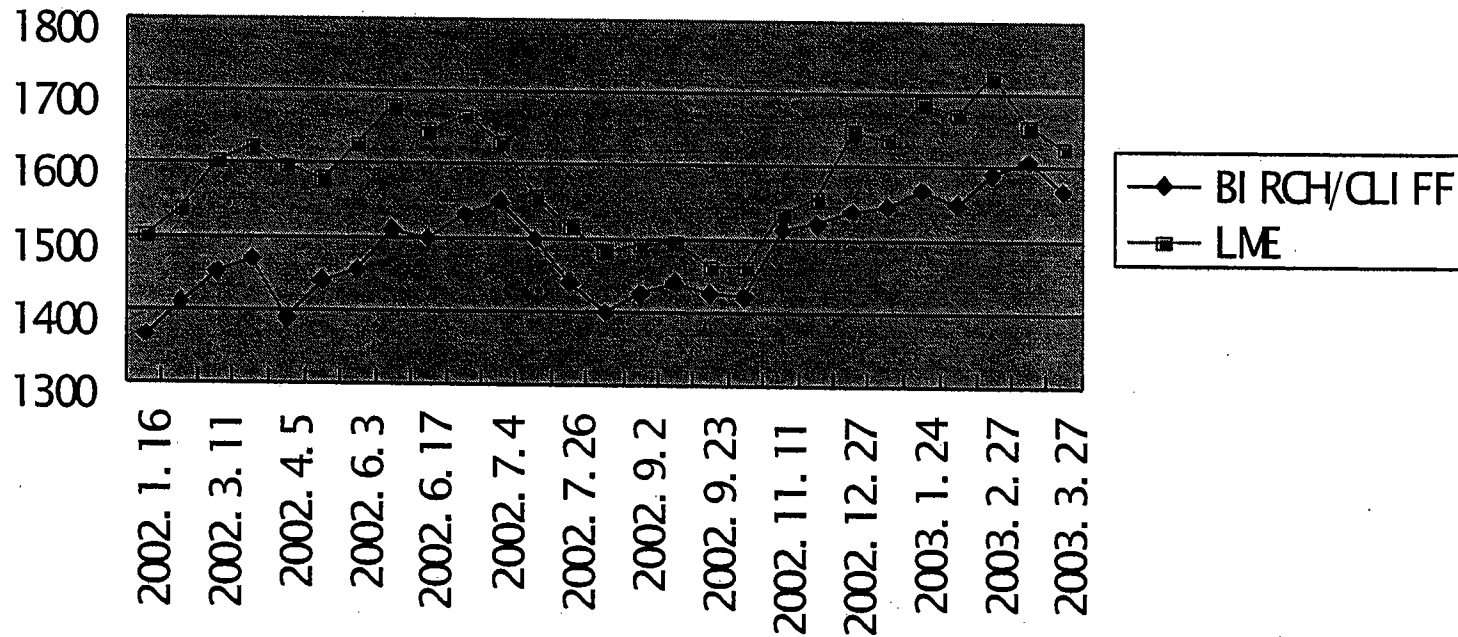
- United States: the biggest exporter to China
- China: the biggest importer from US
- Chinese clients intended to choose US goods due to its good clarification and quality
- Europe & Middle East: stable supplier for China.
Middle East, remain a steady growth



Market Participation (3)

Copper Scrap Price (CIF CMP 2002 — 2003, US origin)

data: Minmetals Import





Market Participation (4)

- contractual prices (US origin, 2002 ~ 2003) varied between 91% to 95% of LME cash price

basically tracking the LME price;

scrap margin & sales quantity shrinking while LME prices remained in low level.



Reason for import growth (1)

- **Rapid growth of copper scrap consumption**
 - * Technical Innovation on direct feeding of scraps in copper processing industry
 - * Production increase in smelting & refining
 - * Fully utilization of scraps

 - **Severe shortage of copper resources**
 - * Alleviate the situation of shortage of copper resources

 - **High premium for copper cathode**
 - * Squeeze the production cost
-



- **Tremendous increase of import in Guangdong area**

- (1) mixed loading of different-grad scraps, over-loaded containers
- (2) lower price/weight declaration in customs

problems:

- * Loss of government import tariff
- * crazy purchasing in the market (especially in US)



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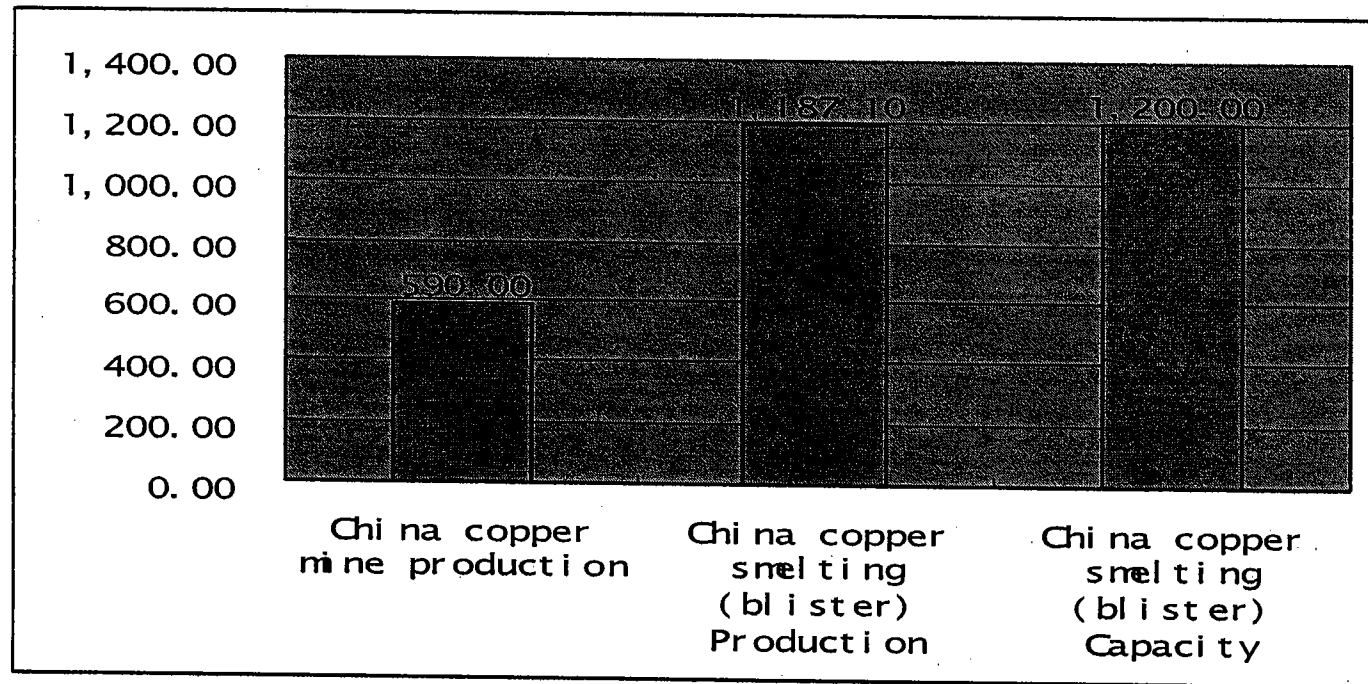
- **Electrolytic copper cathode & Smelter feed**
 - 300 thousand mt□
- **Copper products**
(wire-rod, sheet & plate, etc.)
- **Copper Alloy**
(brass, Sn-P bronze for foundry and electronic components, etc.)
- **Copper sulphate Copper powder**



Gap between Mining & Smelting in 2002:

('000 mt in copper content)

Production : 597.1; Capacity : 610

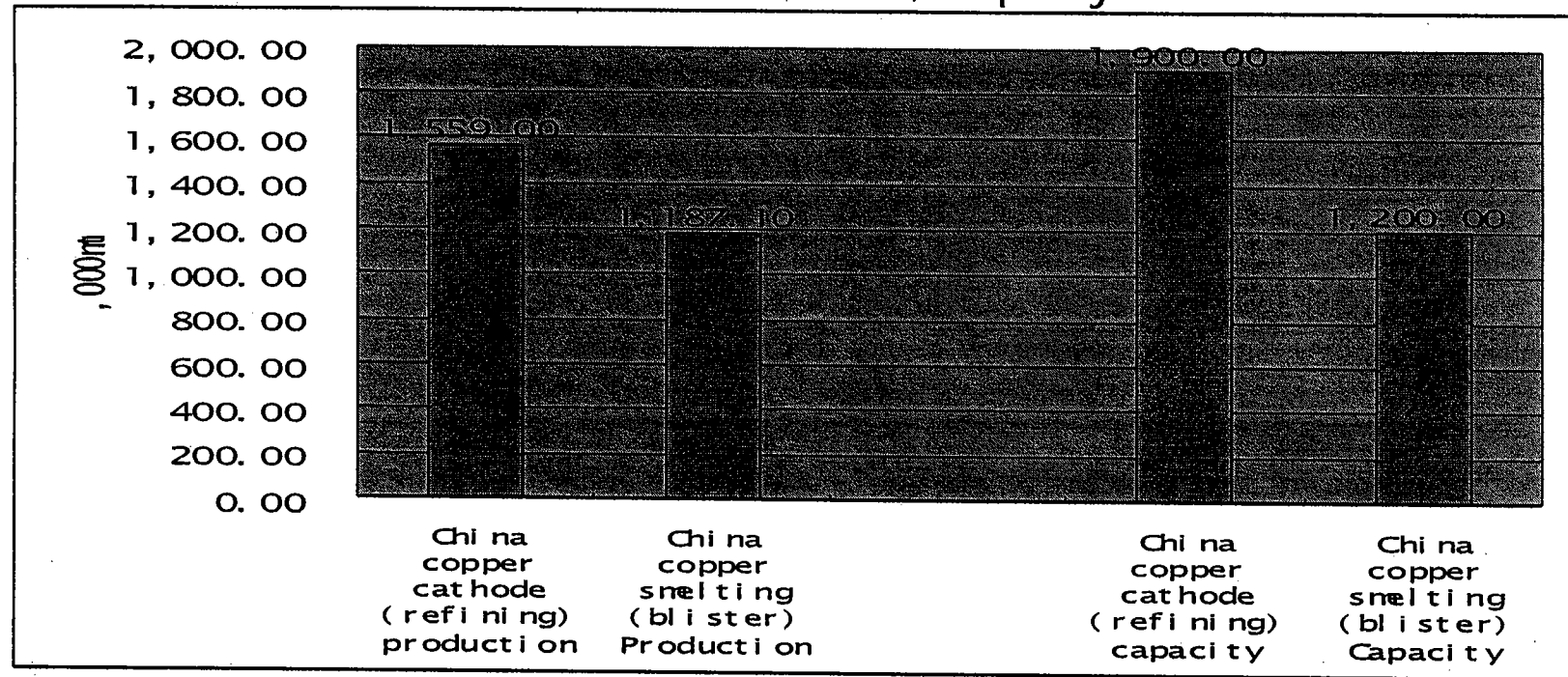




Gap between Refining & Smelting in 2002

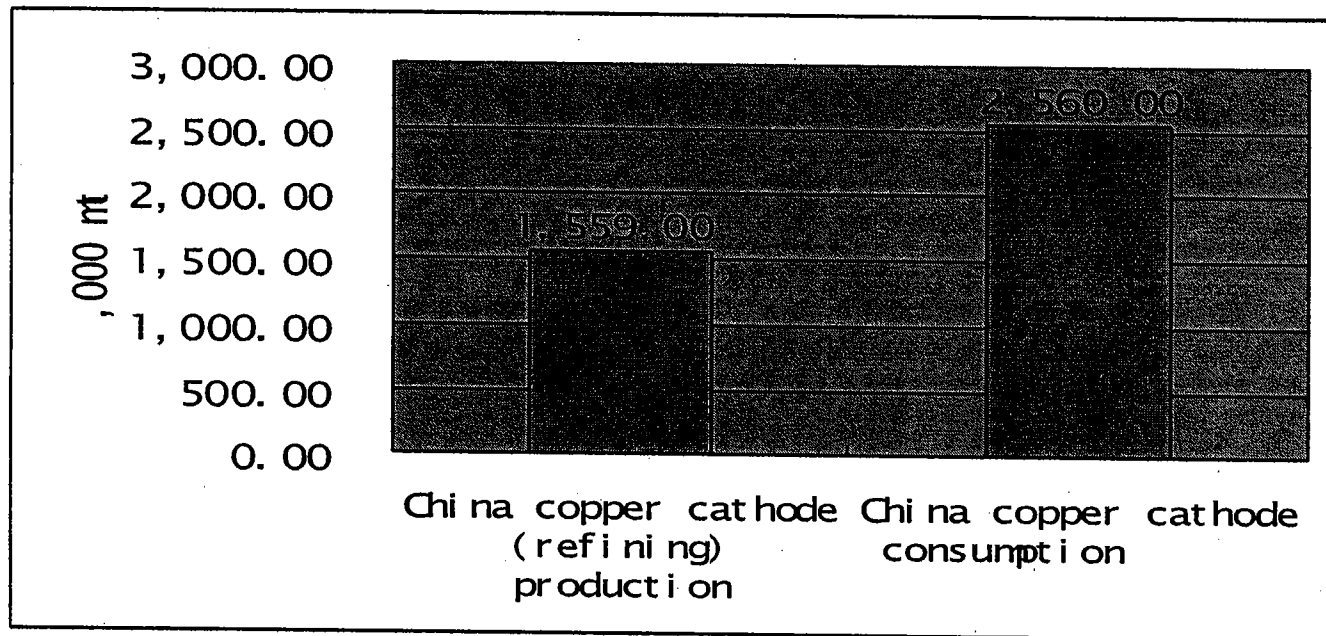
(copper content '000 mt):

Production: 371.9, Capacity: 700





Gap between Consumption & Refining production in 2002: 1,001 ('000 mt)





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Government Policy & Regulations on Imports of Copper Scrap (1)

1. □ To strengthen the management of import scrap □ No.69 issued by State Environmental Protection Administration 2003
2. Chinese government encouraging centralization to establish Recycling Industrial Zone at the following area, for the purpose of pollution control □
Ziya Tianjin; Ningbo Zhejiang; Taicang Jiangsu; Quantong Fujian



Government Policy & Regulations on Import of Copper Scraps (2)

**Measures to be taken jointly by China Nonferrous Metals
Industry Association Metal Recycling Branch and State
Customs General Administration**

1. Before Oct. 14, 2003, all the import enterprises need to “self-checkup” its copper scrap import operation made during Jan., 2001 and Jun., 2003.



Government Policy & Regulations on Import of Copper Scraps (3)

2. Any enterprise, in case of failure of honest customs declaration or tariff implement, should declare the customs again within the period of “self-checkup”, otherwise these enterprise will be punished by government according to the relative regulations and laws.
3. New Classification for Copper Scraps for Import & Export under evaluation and drafting
4. New Pricing Declaration System under evaluation



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China Minmetals Group

Established in 1950

Minerals & Metals

Traditionally a trading company

Invested in industry production in the last 10 years

Total revenue 7 billion us dollars in 2002

Net profit 89 million us dollars in 2002

30 overseas subsidiaries in 17 countries and regions

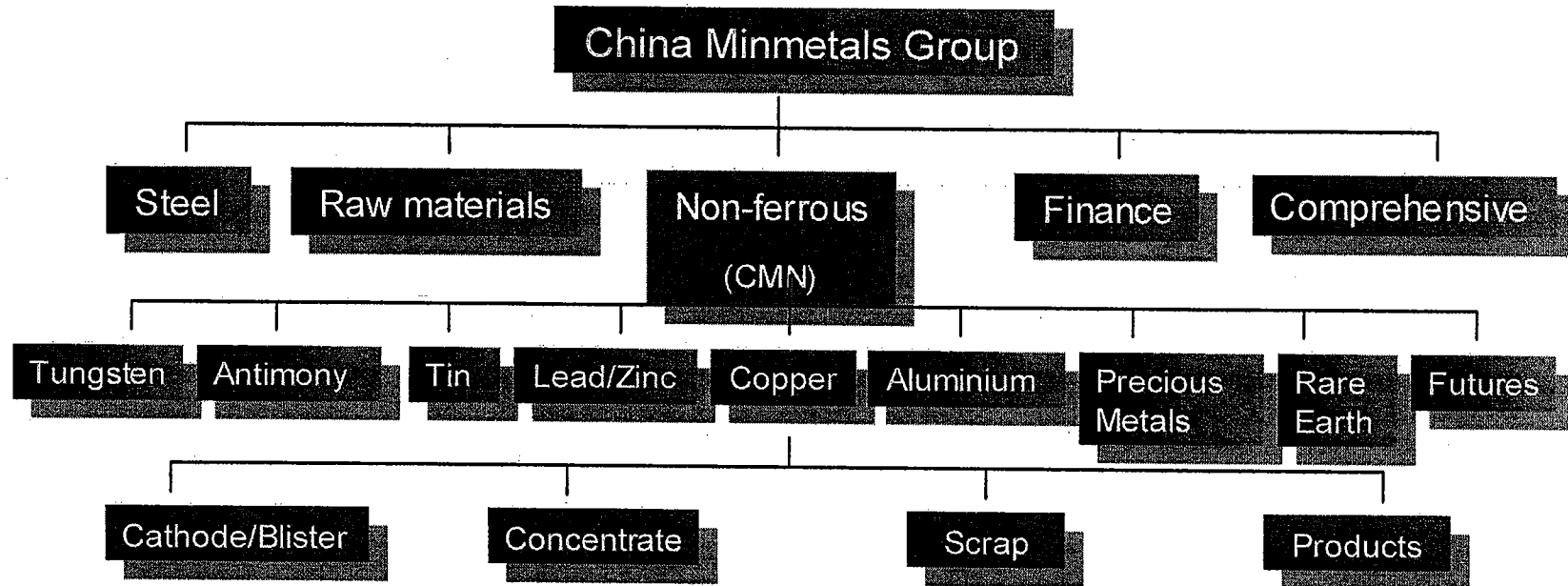
Listed among the 44 "key enterprises" by China Central Government

Six major business units:

- Iron and Steel
- Non-ferrous metals
- Finance
- Raw materials
- Metal products and electrical products
- Real estates



About Minmetals (2.1-2)





Target of China Minmetals Group

- No. 1 nonferrous metals & minerals supplier in China backed-up with domestic & overseas resources;
- The most capable comprehensive supplier with global purchasing network in steel, coke, ferro alloys etc.
- Multi-business leading supplier in financial field.



About Minmetals (2.1-3)

- Top 500 import & export enterprises/companies in China in 2002 :

China Minmetals Group

ranked as 7th (calculated by turnover of import & export)

- Evaluation of <<Fortune>> Magazine for 2002:

China Minmetals Development Co., Ltd.

(– Steel Unit of Minmetals Group publicly-listed in Shanghai)

***ranked as 8th in top 100 Chinese companies listed in
China and overseas stock exchanges (by sales turnover)***



China Minmetals Nonferrous Metals Co., Ltd. (CMN)

- 80% shares held by China Minmetals Group
- Resource supplier with domestic & overseas nonferrous metals & minerals
- Scheduled to be publicly listed in Shanghai Stock Exchange by the end of 2003



About CMN (2.2-2)

Minmetals Copper Market Share in China

The biggest importer of copper cathodes over last 7 years

- 180,000 mt in 2002, 15% of the total import of China

Important importer of copper concentrate, blister and scrap

- 220,000 mt copper concentrate in 2002, 10% of the total import

- 27, 000 mt blister in 2002, 26% of the total import

- 70, 000 mt No. 2 scrap in 2002, 52% of total import of No. 2 scrap

Involving in copper products business

- 12, 000 mt copper tube export in 2002

Important player of domestic copper marketing (except import quantity)

- 55, 000 mt copper cathode in 2002



About CMN (2.2-3)

Minmetals Investment in Copper Production in China

Company	Stocks	Rank of Share-Holding	Product	Capacity (, 000)
Jiangxi Copper	10%	Second biggest	Cathode	400
Huludao Copper Smelter	30%	Second biggest	Cathode	80
Yantai Smelter	42%	Second biggest	Cathode	60
Tianjin Datong Smelter	65%	Control holder	Anode/Cats	50/35
Changzhou Jinyuan Copper	25%	Second biggest	Wire rod	120
Yixing Jinhui Copper	79%	Control holder	Wire rod	30
Sichuan Liwu Copper Mine	20%		Concentrates	



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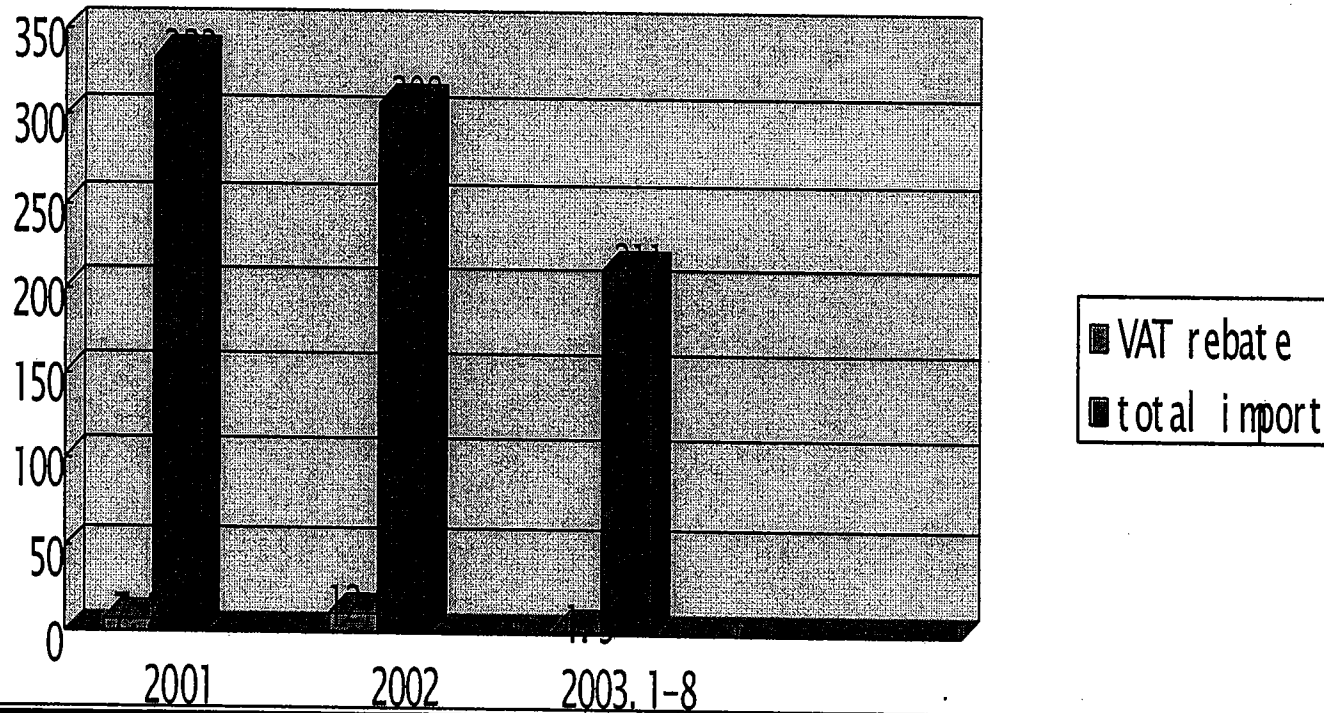


VAT rebate policy tightening copper scrap supply in world market

China is taking protection measures for import of copper scraps



Import under VAT Rebate vs Total Import of Copper Scraps (unit:10,000mt)





Import under VAT rebate :

2.1% of total import of cu scraps (2001);

4% of total import (2002);

1% of total import (Jan. ~ Aug., 2003)



Restricted Encouraging Policy for Copper Scraps Industry

---- Chinese Government Policy

- Advantages of full use of scraps
 - * Reduce the consumption of energy and pollution
 - * Alleviate the pressure of employment
 - * A good supplement to other copper resources



1. Tariff cutback: 2% ~ 1.5%
2. Pre-inspections at loading scraps at origin of export
3. Continuously adjusting the price for customs declaration
4. More and more strict control on inspection of scraps after discharging in China and dismantling, processing



Real Challenge for Copper Scrap Market:

Low cost of dismantling copper/metal scraps

Comprehensive utilization of metal scraps

New technology in direct utilization of high-grade
copper wire scrap

Government-oriented centralization of scrap recycling
industry zones (both for domestic & import scraps)



**Directly Facing challenge of
transforming & globalization world**

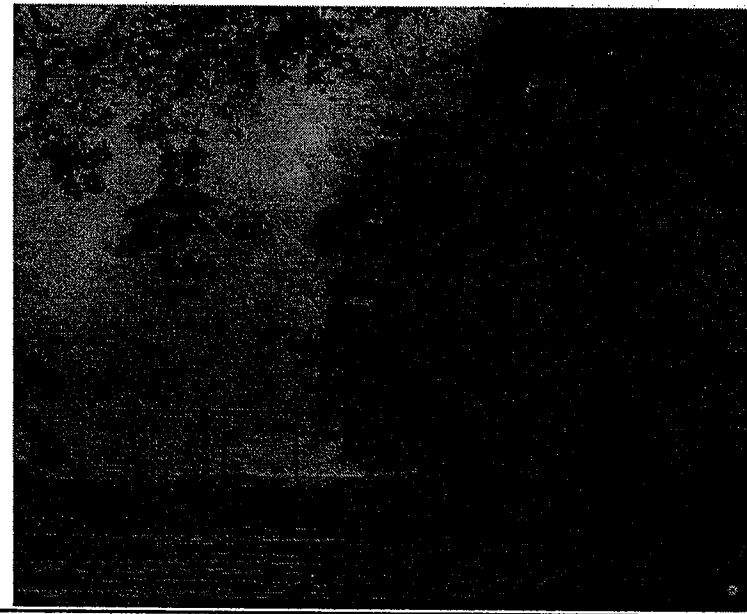


Thank you !

Email: gulm@minmetals.com

[Http://www.minmetals.com](http://www.minmetals.com)

[Http://www.cmnltd.com](http://www.cmnltd.com)





Copper Cathode Net Import ('000MT)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Import	168.4	49.7	67.3	92.3	61.9	137.8	389.1	655.2	818.6	1,164
Export	1.4	6.1	25.7	27.1	68.6	101.8	94.2	109.8	48.8	76.1
Net Import	167	43.6	41.6	65.2	-6.7	36	294.9	545.4	769.8	1,088